

### In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (original) A highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability, having on the steel product surface a zinc alloy plating layer composed of 4 to 10% by mass of Al, 1 to 5% by mass of Mg, up to 0.1% by mass of Ti and the balance of Zn and unavoidable impurities, the plating layer having a metal structure in which one or at least two of the [Al phase], [Zn<sub>2</sub>Mg phase] and [Zn phase] are present in a mixture in the matrix of an [Al/Zn/Zn<sub>2</sub>Mg ternary eutectic structure], and the plating layer containing a Ti-Al base intermetallic compound in one or at least two of the [Al phase], [Zn<sub>2</sub>Mg phase] and [Zn phase].

2. (original) A highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability, having on the steel product surface a zinc alloy plating layer composed of 4 to 22% by mass of Al, 1 to 5% by mass of Mg, up to 0.1% by mass of Ti, up to 0.5% by mass of Si and the balance of Zn and unavoidable impurities, the plating layer of the plated steel product having a metal structure in which an [Mg<sub>2</sub>Si phase], an [Al phase] and a [Zn<sub>2</sub>Mg phase] are present in a mixture in the matrix of an [Al/Zn/Zn<sub>2</sub>Mg ternary eutectic structure], and the plating layer containing a Ti-Al base intermetallic compound in one or at least two of the [Al phase] and [Zn<sub>2</sub>Mg phase].

3. (original) A highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability, having on the steel product surface a zinc alloy plating layer composed of 4 to 22% by mass of Al, 1 to 5% by

mass of Mg, up to 0.1% by mass of Ti, up to 0.5% by mass of Si and the balance of Zn and unavoidable impurities, the plating layer of the plated steel product having a metal structure in which an  $[Mg_2Si]$  phase, an  $[Al]$  phase, a  $[Zn_2Mg]$  phase and a  $[Zn]$  phase are present in a mixture in the matrix of an  $[Al/Zn/Zn_2Mg]$  ternary eutectic structure], and the plating layer containing a Ti-Al base intermetallic compound in one or at least two of the  $[Al]$  phase,  $[Zn_2Mg]$  phase and  $[Zn]$  phase].

4. (original) A highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability, having on the steel product surface a zinc alloy plating layer composed of 4 to 22% by mass of Al, 1 to 5% by mass of Mg, up to 0.1% by mass of Ti, up to 0.5% by mass of Si and the balance of Zn and unavoidable impurities, the plating layer of the plated steel product having a metal structure in which an  $[Mg_2Si]$  phase, an  $[Al]$  phase and a  $[Zn]$  phase are present in a mixture in the matrix of an  $[Al/Zn/Zn_2Mg]$  ternary eutectic structure], and the plating layer containing a Ti-Al base intermetallic compound in one or two of the  $[Al]$  phase and  $[Zn]$  phase].

5. (original) A highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability, wherein the Ti-Al base intermetallic compound according to any one of claims 1 to 4 is  $TiAl_3$ .

6. (original) A highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability, wherein the Ti-Al base intermetallic compound according to any one of claims 1 to 4 is  $Ti(Al_{1-x}Si_x)_3$  (wherein  $x = 0$  to  $0.5$ ).

7. (currently amended) The highly corrosion-resistant hot-dip galvanized steel product excellent in surface

smoothness and formability according to any one of claims 1 to 6 4, wherein the Ti-Al base intermetallic compound contained in an [Al phase] in the plating layer is present in a Zn-Al eutectoid reaction structure in which Zn phases are condensed.

8. (currently amended) The highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability according to any one of claims 1 to 7 4, wherein the size of a dendrite in an [Al phase] in the plating layer is up to 500  $\mu\text{m}$ .

9. (currently amended) A process for producing the highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability according to any one of claims 1 to 8 4, comprising the step of adding a Ti-Zn base intermetallic compound to a plating bath.